

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/634,389	08/05/2003	Tony Gichuhi	5348/55547	5348/55547 6519	
7	590 10/20/20	5	EXAM	EXAMINER	
Timothy T. Patula			DELCOTTO, GREGORY R		
Patula & Associates, P.C. 14th Floor			ART UNIT	PAPER NUMBER	
116 S. Michigan Avenue			1751		
Chicago, IL 6	50603		DATE MAILED: 10/20/200	DATE MAILED: 10/20/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/634,389	GICHUHI ET AL.					
Office Action Summary	Examiner	Art Unit					
	Gregory R. Del Cotto	1751					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	dress				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tirn  11 apply and will expire SIX (6) MONTHS from  12 cause the application to become ABANDONE	N. nely filed the mailing date of this co D (35 U.S.C.§ 133).					
Status							
1) Responsive to communication(s) filed on	<b></b> ·						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3) Since this application is in condition for alloward	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Disposition of Claims							
4) Claim(s) <u>1-37</u> is/are pending in the application.							
4a) Of the above claim(s) <u>11-16</u> is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-10,17-31,36 and 37</u> is/are rejected.							
7) ☐ Claim(s) <u>32-35</u> is/are objected to.							
8) Claim(s) <u>1-37</u> are subject to restriction and/or e	election requirement.	<i>;</i>					
Application Papers							
9) The specification is objected to by the Examine	r.						
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) $\square$ objected to by the $ extbf{E}$	Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correcti							
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PT	O-152.				
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priority application from the International Bureau</li> </ul>	s have been received. s have been received in Applicati ity documents have been receive	on No	Stage				
* See the attached detailed Office action for a list of		d.					
Attachment(s)	🗖 :						
1) M Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Summary Paper No(s)/Mail Da						
Notice of Draftsperson's Patent Drawing Review (P10-946)  3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 2-05, 8-03.	5) Notice of Informal P 6) Other:		-152)				

Art Unit: 1751

#### **DETAILED ACTION**

1. Claims 1-37 are pending.

Applicant's election of Group I, claims 1-10 and 17-37, in the reply filed on 8/8/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 11-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/8/05.

### Claim Objections

Claims 2-6, 14, 18, 23, and 29 are objected to because of the following informalities:

With respect to claims 2, 5, 6, 14, 18, 23, and 29, the claims recite "selected from the group consisting essentially of"; to be in proper Markush form, the word "essentially" should be deleted. Claims 3 and 4 have been rejected due to their dependency on claim 2.

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Application/Control Number: 10/634,389 Page 3

Art Unit: 1751

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 1751

2. Ascertaining the differences between the prior art and the claims at issue.

- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8, 10, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Manabe et al (US 4,219,433).

Manabe et al teach metal corrosion inhibitor comprising benzoic acid, a trialkanolamine, phosphoric acid, and at least selected from mercaptobenzothiazole, etc., which exhibit excellent anti-corrosive property to various metals for a long term and can be diluted with an aqueous liquor and can be employed in combination with usual anti-freezing agents. See Abstract. The metal corrosion inhibitor of the invention may be employed in solid form and in that case, the inhibitor is added to cooling water as it is. The corrosion inhibitor may also be prepared to provide a commercially available liquid product. In that case, the inhibitor is dissolved in an appropriate amount of water. In the case of dissolving in water, the concentration is usually selected from 30 to 50% by weight. When the corrosion inhibitor is employed, it is desirable that the pH of the

Art Unit: 1751

cooling water to which the inhibitor is added falls within the range of 6.5 to 9.5. In order to maintain the pH of the cooling water within 6.5 to 9.5, an appropriate basic material may also be added to the cooling water including sodium hydroxide, potassium hydroxide, etc. See column 3, line 55 to column 4, line 7.

Specifically, Manabe et al teach compositions in cooling water containing 4,000 ppm benzoic acid, 2500 ppm triethanolamine, 800 ppm trisodium phosphate, and 500 ppm of sodium salt of mercaptobenzothiazole. See column 5, lines 10-30. Sodium hydroxide was also added to these compositions to maintain the pH. See column 4, lines 40-69. Note that, with respect to instant claim 10, the Examiner asserts that the triethanolamine and benzoic acid would react to form a stable aminocarboxylate salt because simple mixing of the triethanolamine and benzoic acid in water as taught by Manabe et al would allow this reaction to inherently occur. Additionally, the Examiner asserts that a component such as trisodium phosphate would also function as a pH adjusting agent due to its basic nature. Manabe et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teaching of Manabe et al anticipate the material limitations of the instant claims.

Claim 1-7, 10, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 020,042.

'042 teaches a non-petroleum based metal corrosion inhibitor in the form of a solution of compounds mixed together in particular proportions to form a non-petroleum based coating for preventing, or inhibiting, the oxidation of metals. The solution is

Art Unit: 1751

prepared from aliphatic monobasic acids, aromatic acids, amines, and water, with or without a lubricant. See Abstract. Generally, the sequence of addition of the various components appears to be important to get a finished product which is clear, stable and which can be diluted to produce a stable product. The mixture of the acid component and lubricant are added to water with stirring in a suitable mixing device. This is ifollowed by the addition of the aminoalkylalkanolamine. See page 8, lines 1-15.

Specifically, '042 teaches a compositions containing 12-18% containing 60% tall oil fatty acids and 40% rosin; 2 to 4% 100 SSU petroleum oil, 5 to 10% of an amine mixture containing 10% morpholine, 10 to 20% benzoic acid, and 48 to 71% water. See page 16, lines 1-15. Additionally, other examples show the use of triethanolamine. See page 19, lines 5-15. Note that, with respect to instant claim 10, the Examiner asserts that the morpholine or triethanolamine and benzoic acid would react to form a stable aminocarboxylate salt because simple mixing of the morpholine or triethanolamine and benzoic acid in water as taught by '042 et al would allow this reaction to inherently occur. '042 discloses the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teaching of '042 anticipates the material limitations of the instant claims.

Claims 1-7, 10, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 84/02146.

'146 teaches a method for using alkanolamine-carboxylic acid salts as a coating for friction materials which during use contact at least part of the time. The method

Application/Control Number: 10/634,389 Page 7

Art Unit: 1751

comprises contacting the friction material with an aqueous solution comprising at least about 0.05% by weight alkanolamine-carboxylic acid salts being the reaction product of alkanolamine and C4 to C20 carboxylic acid; and thereafter evaporating water from the aqueous coating on the friction material so as to leave the friction material with a coating comprising alkanolamine-carboxylic acid salts. See Abstract. The most preferably alkanolamines are tertiary and secondary alkanolamines, most preferably, diethanolamine. The most preferably acids are benzoic acid and heptanoic acid. See page 3, lines 1-20. These alkanolamine-carboxylic acid salts may be prepared by blending the alkanolamine and carboxylic acid in stoichiometric proportions in water at room temperature. Alternately, the salt may be formed by such combination at elevated temperatures. '146 discloses the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of '146 anticipate the material limitations of the instant claims.

Claims 21-24, 26-31, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manabe et al (US 4,219,433).

Manabe et al are relied upon as set forth above. Note that, with respect to process claims 22-24 and 36, the Examiner asserts that one of ordinary skill in the art would have been motivated to mix the ingredients in the order recited by the instant claims because Manabe et al teach mixing the ingredients and it is obvious to mix in any order. With respect to claim 31, this simply requires that the ingredients are mixed

Art Unit: 1751

and then placed in another vessel for storage which is clearly suggested by Manabe et al because all cleaning compositions must be place in a vessel for storage.

Manabe et al do not teach with sufficient specificity, a composition or method of making a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success, because the broad teaching of Manabe et al suggest a composition and method of making a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 84/02146.

'146 are relied upon as set forth above. Note that, with respect to process claim 36, the Examiner asserts that one of ordinary skill in the art would have been motivated to mix the ingredients in the order recited by the instant claims because '146 teach mixing the ingredients and it is obvious to mix in any order.

'146 do not teach with sufficient specificity, a composition or method of making a composition using the specific steps containing water, an amine, carboxylic acid, and

Art Unit: 1751

the other requisite components of the composition in the specific proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success, because the broad teaching of '146 suggest a composition and method of making a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 1-6, 8, 10, 17, 18, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Yarham et al (US 4,379,072).

Yarham et al teach a non-petroleum based metal corrosion inhibiting composition comprising 75 to 90% water, 2-8% linseed oil fatty acid, 1 to 10% C6-C12 dibasic acid and 3 to 8% of an amine blend containing morpholine and an alkanolamine such as triethanolamine, and 0.5 to 3% of a water-soluble alkali metal base. See Abstract. Suitable base materials include alkali metal hydroxide, carbonate or other basic alkali metal material. See column 2, lines 1-6. Specifically, Yarham et al teach a composition containing 84.8% water, 2% morpholine, 4% azelaic acid, 0.8% caprylic acid, 0.5% oleyl sarcosine, 3% monoethanolamine, and 4% linseed fatty acid. See column 2, lines 30-55. Note that, with respect to instant claim 10, the Examiner asserts that the triethanolamine or morpholine and caprylic (octanoic) acid would react to form a stable

Art Unit: 1751

aminocarboxylate salt because simple mixing of the triethanolamine and octanoic acid in water as taught by Yarham et al would allow this reaction to inherently occur.

Yarham et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of Yarham anticipate the material limitations of the instant claims.

Claims 22, 23, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarham et al (US 4,379,072).

Yarham et al are relied upon as set forth above. Note that, with respect to process claims 22, 23, and 36, the Examiner asserts that one of ordinary skill in the art would have been motivated to mix the ingredients in the order recited by the instant claims because Yarham et al teach mixing the ingredients and it is obvious to mix in any order.

Yarham et al do not teach with sufficient specificity, a composition or method of making a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success, because the broad teaching of Yarham et al suggest a

Art Unit: 1751

composition and method of making a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 1-6, 8, 10, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Naghshineh et al (US 6,492,308).

Naghshineh et al teach a cleaning solution for cleaning microelectronic substrates containing 0.05 to 12.4% by weight of quaternary ammonium hydroxide, 0.2 to 27.8% by weight of an organic amine such as diethanolamine, triethanolamine, etc., 0.1 to 10.9% by weight of a corrosion inhibitor such as ascorbic acid, and the balance water. See claim 1 and column 3, line 60 to column 4, line 5. Note that, the Examiner asserts that the quaternary ammonium hydroxide as taught by Naghshineh et al would be encompassed by the terminology "pH adjusting agent" as recited by the instant claims. Note that, with respect to instant claim 10, the Examiner asserts that the triethanolamine and ascorbic acid would react to form a stable aminocarboxylate salt because simple mixing of the triethanolamine and ascorbic acid in water as taught by Naghshineh et al et al would allow this reaction to inherently occur. Naghshineh et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Accordingly, the teachings of Naghshineh et al anticipate the material limitations of the instant claims.

Claims 21-23, 26-29, 31, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naghshineh et al (US 6,492,308).

.\_\_.

Art Unit: 1751

Naghshineh et al are relied upon as set forth above. Note that, with respect to process claims 22-24 and 36, the Examiner asserts that one of ordinary skill in the art would have been motivated to mix the ingredients in the order recited by the instant claims because Naghshineh et al teach mixing the ingredients and it is obvious to mix in any order. With respect to claim 31, this simply requires that the ingredients are mixed and then placed in another vessel for storage which is clearly suggested by Naghshineh et al because all cleaning compositions must be place in a vessel for storage.

Naghshineh et al do not teach with sufficient specificity, a composition or method of making a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success, because the broad teaching of Naghshineh et al suggest a composition and method of making a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 9, 20, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naghshineh et al (US 6,492,308) as applied to claims 1-6, 8, 10, 17, 18, 21-23, 26-29, 31, 36, and 37 above, and further in view of llardi et al (US 5,466,389).

Art Unit: 1751

Naghshineh et al are relied upon as set forth above. However, Naghshineh et al do not teach the use of ammonium hydroxide in addition to the other requisite components of the composition as recited by the instant claims.

Ilardi et al teach aqueous alkaline cleaning solutions for cleaning microelectronic substrates and maintaining substrate surface smoothness comprising a metal ion free base, a nonionic surfactant, and a component to reduce or control the pH of the cleaning solution to a pH within the range of from about pH 8 to about pH 10. See Abstract. Suitable alkaline components include quaternary ammonium hydroxides, ammonium hydroxide, etc. See column 3, lines 34-55.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use ammonium hydroxide in the cleaning composition taught by Naghshineh et al, with a reasonable expectation of success, because llardi et al teach the equivalence of ammonium hydroxide to tetramethyl quaternary ammonium hydroxide as alkaline materials in a similar cleaning composition and further, Naghshineh et al teach the use of quaternary ammonium hydroxides in general.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 1751

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10 and 17-37 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 and 22-29 of copending Application No. 10/832139. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-17 and 22-29 of 10/832139 encompass the material limitations of the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success, because claims 1-17 and 22-29 of 10/832139 suggest a composition and method of making a composition using the specific steps containing water, an amine, carboxylic acid, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### Allowable Subject Matter

Claims 32-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1751

None of the references of record, alone or in combination, teach or suggest a paint composition containing a first complexing agent that comprises an amine group and a second complexing agent that comprises a carboxylic acid.

#### Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/634,389 Page 16

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory R. Del Cotto Primary Examiner Art Unit 1751

GRD October 15, 2005